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MAR 28 2019

Air & Radiation Division

March 27, 2019

James Rebarchak
Regional Air Quality Program Manager
Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, PA 19401

Re: Title V Annual Compliance Certification
Braskem America, Inc. - Marcus Hook
TVOP 23-00012; Report Period: 1/1/2018 - 12/31/2018

Dear Mr. Rebarchak:

Braskem America, Inc. hereby submits the above-referenced report. This attached report is required by our Title V Permit, Section B, Condition #024. As required by our Title V Permit, Section B, Condition #026, Braskem America, Inc. hereby states that this facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa Code §127.512(i).

Please note the following contacts at the facility for Title V:

<u>Permit Contact Person</u>	<u>Responsible Official</u>
Name: Jeffrey Hirt	Conway Yee
Title: Environmental Engineer	Facility Manager
Phone: (610) 497- 8229	(610) 497-8208

If you have any questions, please do not hesitate to contact our *Environmental Engineer*, Jeffrey Hirt, at the above number or by e-mail at jeffrey.hirt@braskem.com.

Sincerely,
BRASKEM AMERICA, INC.

Conway Yee
Facility Manager

cc: Air Enforcement Branch (3AP12)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Enclosures



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY
COMPLIANCE CERTIFICATION FORM

(25 Pa. Code § 127.513)

Plant Name:	BRASKEM AMER INC/MARCUS HOOK	Owner/Operator:	BRASKEM AMER INC
Tax ID/Plant:	25-1534498-1	DEP Facility ID:	515469
Contact Person:	JEFFREY HIRT	Title:	ENVIRONMENTAL ENGINEER
Operating Permit #:	23-00012	Phone Number:	(610) 497-8229

For the period **1/1/2018 - 12/31/2018**, **BRASKEM AMER INC/MARCUS HOOK** has been in continuous compliance with all applicable requirements of permit # **23-00012**, determined by the method(s) of compliance specified in said permit, except for the following deviations, exceedances and excursions:

Sect./Cond. #	Citation #	Source	Noncompliance	Monitoring Method(s)	Date	Duration	Corrective Action(s)
D/#003	(a)(1)	102A	The facility suffered a complete loss of steam supply from the utility provider. This event caused significant portions of the facility to immediately cease operation in accordance with safe operating procedures.	Recorded data through DCS and PI systems during this event as well as verbal accounts from facility personnel.	3/22/18	3/22/18	Braskem followed its loss of utility procedures in accordance with safe operating guidelines. Steam was restored to the necessary production units to allow safe startup and normal operation
D/#003	(a)(1)	102B					


			At the initial onset of this event there may have been visible emissions at the flare in excess of five minutes.				
D/#003	(a)(2)	102A	There were three instances in this reporting period where the indications from all three flare pilot instruments were showing failure. On 3/4/18, this instance was approximately two minutes. On 4/5/18 and 11/28/18, the instances were less than one minute. All other flare operating requirements were in the normal operating range.	Redundant thermocouples are installed on the flare tip dedicated to the continuous monitoring of the flare for flame presence. It should be noted that Braskem's conclusion, based on evaluation of all available information, is that the flare flame never completely extinguished. Flame outage results in certain operating conditions, notably including a loud sound accompanying a restart of the flare; these supporting indications of flare flame outage did not occur. Furthermore, there were several five second interval readings during the periods above where the thermocouples indicated the presence of a flame. Instead, during the relevant periods, it is more likely that variable flare steam flows (related to abnormal flare process gas conditions) occurring contemporaneous with high winds together caused lower thermocouple temperatures.	3/4/18, 4/5/18, 11/28/18	3/4/18, 4/5/18, 11/28/18	In all cases the facility closely monitored the situation to ensure that the flare instrumentation returned to a condition of flame presence.
D/#003	(a)(2)	102B					The facility also initiated an investigation related to these events to understand potential causes and implement necessary actions.
C(#014)		102B	Pursuant to a PADEP visit on	Weekly visible emission inspections performed by facility	6/12/18	N/A	Braskem operations completed housekeeping efforts to remove

			this date, it was observed that polypropylene pellets/solids appeared to have accumulated on the Plant 2 extruder roof.	personnel.			these solids from the roof. Process equipment in this area was also inspected in order to confirm it was operating within specifications. In addition to continued housekeeping efforts, an engineering evaluation has been initiated to determine actions that may be required towards preventing this accumulation in the future.
D/#015	(a)	103A	Observed the design of several pressure relief valve piping configurations on equipment that was not equipped with a cap, blind flange, plug, or second valve which resulted in an Open Ended Line condition.	Visual inspections by facility personnel.	6/11/18, 6/12/18	N/A	Initiated and completed projects to modify field piping to eliminate potential open ended lines.
D/#018	(a)	107					
D/#001	(a)	106	Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions during this reporting	Periodic sampling results and automated control systems to adjust flare BTU content.	6/11/18, 6/29/18, 12/24/18	6/11/18, 6/29/18, 12/24/18	Pursuant to the discovery of the sample results, ETP performed the necessary adjustments to the process to return the flare gas to the desired conditions.
D/#012	(i)	106					
D/#001		107					
D/#002	(a)	107					
D/#014	(i)	107					

period.

Certification of Truth, Accuracy and Completeness

Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009 (b) (2), I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this form are true, accurate, and complete.

Name:	Conway Yee	Title:	Facility Manager
Signed:		Date:	3/27/19

This certification must be signed by a responsible official. Any certification submitted without a valid signature will be returned.

The owner/operator shall identify any other material information needed in this certification to also comply with section 113(c)(2) of the Clean Air Act. If more spaces are needed, complete additional pages using the format shown in Addendum 1. This certification does not replace requirements pertaining to the submission of malfunction and CEM reports. DO NOT include that information on this form.

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
[25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503] (Permit Renewal)	Section B	(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Ma...	The renewal application was submitted to PADEP on 12/21/2018 and deemed administratively complete on 2/14/19. All applicable information and fees were submitted with the renewal application.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA] (Inspection and Entry)	Section B	(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following: (1) Enter at reasonable times upon...	A guard is on duty at the plant entrance during normal business hours to allow PADEP and its authorized representatives to enter the facility. Based upon knowledge, information, and belief, the facility never denied entrance to PADEP or its authorized representatives in this reporting period. (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)] (Compliance Requirements)	Section B	(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following: (1) Enforcement action (2) Permit termination, revocation ...	First sentence of (a). With the possible exception of those terms and conditions identified below, emission units described in this permit were in compliance with all permit terms and conditions during the compliance review period, as determined by the required testing and	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>monitoring in the permit.</p> <p>Second sentence of (a): Statement of law that imposes no compliance obligations and is thus not amenable to certification.</p> <p>Second sentence of (b): Braskem presumes that compliance with the operating and work practice standards incorporated into the Title V permit constitutes compliance with this requirement. With the possible exception of the deviations identified below, emission units described in this permit were in compliance with all permit terms and conditions in this permit over the previous year, as determined by all required testing and monitoring in the permit.</p> <p>The condition (c) is an explanatory statement that imposes no compliance obligations and is thus not amenable to certification. PADEP made a determination of the physical configurations or design details in applications for plan</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			approvals/ installation permits and operating permits which are essential for compliance with the applicable requirements of the Title V permit. Therefore, no certification is required.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §§ 127.411(d) & 127.512(c)(5)] (Duty to Provide Information)	Section B	(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. (b) Upon request, the p...	Facility has supplied all information requested by PADEP within a reasonable time. Facility has supplied copies of records requested by PADEP within a reasonable time.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code § 127.541] (Significant Operating Permit Modifications)	Section B	When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA...	Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §§ 127.704, 127.705 & 127.707] (Fee Payment)	Section B	(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual ...	Permit fees were paid according to the invoice provided by the Department. Applicable annual Title V permit fees were paid by September 1 for the previous calendar year. (c) Statements of law that impose no compliance obligations and are thus not amenable to	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>certification.</p> <p>(d) Statements of law that impose no compliance obligations and are thus not amenable to certification.</p> <p>(e) Statements of law that impose no compliance obligations and are thus not amenable to certification.</p> <p>(f) Statements of law that impose no compliance obligations and are thus not amenable to certification.</p>	
<p>[25 Pa. Code §§ 127.14(b) & 127.449] (Authorization for De Minimis Emission Increases)</p>	Section B	<p>(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written n...</p>	<p>Plant changes are reviewed within the facility's Management of Change procedure.</p> <p>There were no minor sources installed or de minimis increases of the mentioned minor sources during this compliance review period.</p> <p>(f) Statements of law that impose no compliance obligations and are thus not amenable to certification.</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermittent</p>
<p>[25 Pa. Code §§ 127.11a & 127.215]</p>	Section B	<p>(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in</p>	<p>There were no sources which were reactivated during this compliance</p>	<p><input checked="" type="checkbox"/> Continuous</p>

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
(Reactivation of Sources)		accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will...	review period.	<input type="checkbox"/> Interimittent
[25 Pa. Code §§ 121.9 & 127.216] (Circumvention)	Section B	(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, ...	The facility did not engage in any activity which may have been construed as circumvention of applicable permit or regulatory requirements. The facility did not use a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which would conceal or dilute an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated there under during this compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interimittent
[25 Pa. Code §§ 127.402(d) & 127.513(1)] (Submissions)	Section B	(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the: Regional Air Program Manager PA Department of Environmental Protection (At the address given on the permit transmittal letter, or otherwise notified)	All required submissions were submitted to the appropriate address of either PADEP or EPA. All applications, forms, reports or compliance certifications submitted contained the required certification statement by the responsible official.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interimittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
[25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA] (Sampling, Testing and Monitoring Procedures)	Section B	(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable req... (b) Any report...	Monitoring, analysis, testing, and sampling procedures specified by this permit were performed as needed. There were no additional applicable requirements promulgated under the Clean Air Act after permit issuance. Monitoring, analysis, testing, and sampling procedures specified by this permit were conducted in accordance with the requirements of 25 Pa Code Chapter 139 or by the Clean Air Act, as needed.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §§ 127.511 & Chapter 135] (Recordkeeping Requirements)	Section B	(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following: (1) The date, place (as defined in the permit) and time of sampling or measurements. (2) The dates the analyses were performed. (...)	Facility has maintained and made available, upon request of the Department, all records of required monitoring information. Facility has maintained and made available, upon request of the Department, all records required to comply with reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §§ 127.411(d), 127.442,	Section B	(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit.	Facility has fulfilled all reporting requirements	<input checked="" type="checkbox"/> Continuous

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23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
127.463(e) & 127.511(c)] (Reporting Requirements)		In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean A...	specified by this permit. Moreover, there were no additional applicable requirements promulgated under the Clean Air Act after permit issuance. Reporting requirements specified by this permit were performed, as needed, and contained the required certification statement by the responsible official. All applications, forms, reports or compliance certifications submitted contained the required certification statement by the responsible official. The first sentence of (d) imposes obligations on PADEP and is therefore not amenable to certification by Braskem. The second sentence is a statement of law.	<input type="checkbox"/> Interimittent
[25 Pa. Code § 127.513] (Compliance Certification)	Section B	(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, includin...	The certification report is intended to satisfy this requirement. All applications, forms, reports or compliance certifications submitted contained the required certification statement by	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interimittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
[25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68] (Risk Management)	Section B	(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Se...	the responsible official. Braskem America, Inc. has developed & implemented a Risk Management Plan (RMP). Braskem America, Inc. has prepared a written RMP meeting the requirements of 40 CFR Part 68. The original RMP was submitted to the EPA on or before June 21, 1999. The facility has submitted all necessary updates, corrections, and resubmittals as required. (b) This is a historical requirement and imposes no specific requirements during the current period. (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification. (d) In the cover letter for the facility's Annual Certification Report, the following statement was included: Facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code §	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>127.512(i).</p> <p>(e) Facility has maintained records supporting implementation of accidental release program for the past five (5) years.</p> <p>(f) This is a historical requirement and imposes no specific requirements during the current compliance review period. Facility has registered and submitted RMP.</p>	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<p>[25 Pa. Code §121.7] (Prohibition of air pollution.)</p>	<p>Section C - I. Restrictions - Emission Restriction(s)</p>	<p>No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. § 4003).</p>	<p>Braskem has designed and implemented policies and procedures for incident reporting that are consistent with permit requirements.</p>	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<p>[25 Pa. Code §123.1] (Prohibition of certain fugitive emissions)</p>	<p>Section C - I. Restrictions - Emission Restriction(s)</p>	<p>No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:</p> <p>(a) construction or demolition of buildings or structures;</p> <p>(b) grading, paving and maintenance of roads and streets;</p> <p>(c) use of roads and streets. Emissions f...</p>	<p>Braskem has designed and implemented policies and procedures for incident reporting that are consistent with permit requirements</p>	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<p>[25 Pa. Code</p>	<p>Section C - I. Restrictions -</p>		<p>To control the emissions of fugitive particulate matter,</p>	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
§123.2] (Fugitive particulate matter)	Emission Restriction(s)	No person may permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Section C, Condition # 002 if the emissions are visible at the point the emissions pass outside the person's property.	the facility has work practices in place, in accordance with applicable regulatory requirements for PM and as specified by individual Permit terms and conditions below. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices.	<input type="checkbox"/> Intermittent
[25 Pa. Code §123.31] (Limitations)	Section C - I. Restrictions - Emission Restriction(s)	A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.	To prevent the detection of malodors outside of the property, the facility has work practices in place, in accordance with applicable regulatory requirements and as specified by individual permit terms and conditions below. These practices include a process for review and correction of deviations reported via routine "odor and visible emission	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			inspections", the facility's total event reporting process, and the hydrocarbon Leak Detection and Repair program. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §123.41] (limitations)	Section C - I. Restrictions - Emission Restriction(s)	A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following: (a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour. (b) Equ...	Performed weekly observations (modified Method 22) using "Odor and Fugitive Emissions" inspection form submitted to the Department for review/approval on 4/16/2009. Additionally, at the flare, an automated system is in place to measure the propensity of the flame to smoke and add steam to mitigate smoking.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §123.42] (Exceptions)	Section C - I. Restrictions - Emission Restriction(s)	The emission limitations of 25 Pa. Code § 123.41 shall not apply when: (a) The presence of uncombined water is the only reason for failure of the emission to meet the limitations; (b) The emission results from the operation of equipment used	Statements of law that impose no compliance obligations and are thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
[25 Pa. Code §129.14] (Open burning operations)	Section C - I. Restrictions - Emission Restriction(s)	No person may permit the open burning of material in an air basin, except where the open burning operations result from: (a) a fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer; (b) any fire set for the purpose of...	Braskem did not conduct any of the listed fire exercises that required specific Department approval.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section C - II. Testing Requirements	(a) The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement. (b) If at any time the Department has cause...	Statements of law that impose no compliance obligations and are thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §123.43] (Measuring techniques)	Section C - III. Monitoring Requirements	Visible emissions may be measured using either of the following: (a) A device approved by the Department and maintained to provide accurate opacity measurements. (b) Observers, trained and qualified, to measure plume opacity with the naked eye or with the aid of any devices approved by the Dep...	This is a historical requirement which imposes requirements during performance testing. When the facility measures visible emissions, such as during performance testing, a trained observer is used. Additionally, no quantitative measurements were required during this compliance review period, thus this requirement is	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
[25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section C - III. Monitoring Requirements	(a) The permittee shall monitor the facility, once per operating day, for the following: (1) Odors which may be objectionable (as per 25 Pa. Code §123.31). (2) Visible Emissions (as per 25 Pa. Code §§123.41 and 123.42). (3) Fugitive Particulate Matter (as per 25 Pa. Code §§ 123.1 and 123.2). (...	not amenable to certification during this compliance review period. To prevent the detection of malodors outside of the property, the facility has work practices in place, in accordance with applicable regulatory requirements and as specified by individual permit terms and conditions below. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections", the facility's total event reporting process, and the hydrocarbon Leak Detection and Repair program. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices. In the event odors or emissions are detected outside the facility, facility has work practices to report, investigate & mitigate the incident. A permanent log of the "odor	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interim

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>and visible emission inspections" forms are kept onsite.</p> <p>(c) Statement of law that imposes no compliance obligations and is thus not amenable to certification.</p>	
<p>[25 Pa. Code §127.441] (Operating permit terms and conditions.)</p>	<p>Section C - IV. Recordkeeping Requirements</p>	<p>[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]</p> <p>(a) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviat...</p>	<p>Facility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process.</p> <p>Facility submitted the necessary record formats to the Department for approval on 4/16/2009.</p>	<p><input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>
<p>[25 Pa. Code §127.441] (Operating permit terms and conditions.)</p>	<p>Section C - V. Reporting Requirements</p>	<p>[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511(c).]</p> <p>(a) The permittee shall submit the following reports:</p> <p>(1) An annual certificate of compliance, due by April 1st of each</p>	<p>This certification report is intended to satisfy this requirement.</p> <p>Applicable events as described in (b) and (c) were communicated to the Department in accordance</p>	<p><input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
		year, for the period covering January 1 through December 31 of the previous year....	notification guidelines.	
[25 Pa. Code §135.3] (Reporting)	Section C - V. Reporting Requirements	(a) The owner or operator shall submit, by March 1 of each year, a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same...	Reports were submitted to the Department by March 1. (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §123.1] (Prohibition of certain fugitive emissions)	Section C - VI. Work Practice Standards	For any source specified in Condition #002 of this Section, the permittee shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following: (a) Use, where possible, of water or chemicals for control of dust ...	To control the emissions of fugitive air contaminants, the facility has work practices in place, in accordance with applicable regulatory requirements for PM and as specified by individual terms and conditions of this permit. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices. Pursuant to a PADEP visit on 6/12/18, it was	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
[25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section C - VI. Work Practice Standards	(a) The permittee shall begin to immediately implement measures, which may include for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A, of th...	Facility does not have any identified sources where there was a required action to implement measures to reduce emissions.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section C - VII. Additional Requirements	For the purpose of this Operating Permit: (1) the Polypropylene Plant No. 1 consists of: Source ID 101A - Three Storage Silos Source 102A - Polypropylene Mfg. Sources Source ID 103A - Fugitive Sources (2) the Polypropylene Plant No. 2 consists of: Source ID 101B - Three Storage Silos Source 102B - ...	Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section C - VII. Additional Requirements	This Operating Permit includes some requirements pursuant to 25 Pa. Code Sections 129.91 - 129.95 (RACT I) and 129.96 - 129.100 (RACT II). However, all of the RACT I and RACT II requirements are not included as evaluations are ongoing. This Operating Permit will be amended when evaluation of RACT I a...	Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101A - PLANT 1, THREE STORAGE	Section D - I. Restrictions -	No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of	Based on emissions calculations using the	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
SILOS [25 Pa. Code §123.13] (Processes)	Emission Restriction(s)	particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.	design specifications in the permit application, the particulate matter emissions do not exceed 0.04 grains per dry standard cubic foot.	<input type="checkbox"/> Intermittent
101A - PLANT 1, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Emission Restriction(s)	(a) Particulate Matter (PM/PM10) emissions from Plant No.1 shall be less than 7.10 tons per 12-month rolling sum. (b) The polypropylene Plant Number 1 consists of: Source 101A - Three Storage Silos Source 102A - Polypropylene Mfg. Sources Source 103A - Fugitive Sources	Particulate matter emissions for the 101A silos are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 7.10 ton per 12 month rolling sum emission limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101A - PLANT 1, THREE STORAGE SILOS [25 Pa. Code §129.99] (Alternative RACT proposal and petition for alternative compliance schedule.)	Section D - I. Restrictions - Emission Restriction(s)	[Additional authority of this permit condition is also derived from 25 Pa. Code §127.511.] The total volatile organic compounds (VOC) emissions from the silos under this source identification shall not exceed 12.10 tons on a 12-month rolling sum.	VOC emissions for the 101A silos are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 12.10 ton per 12 month rolling sum emission limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101A - PLANT 1, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit	Section D - I. Restrictions - Throughput Restriction(s)	Polypropylene production from Plant 1 shall not exceed 595,680,000 pounds per 12-month rolling sum.	Production is tracked monthly; a 12-month rolling sum production rate is calculated and compared to the production limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
terms and conditions.)				
101A - PLANT 1, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is from 25 Pa. Code Section 129.100.] The permittee shall monitor the loading (polypropylene production) and hours of operation of the silos on a monthly basis.	Production and silo hours are tracked monthly; a 12-month rolling sum production rate is calculated and compared to the production limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101A - PLANT 1, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is from 25 Pa. Code Section 129.100.] The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and a...	Emissions for the 101A silos are calculated monthly and as a 12 month rolling sum using approved emission calculation methodologies.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101A - PLANT 1, THREE STORAGE SILOS [25 Pa. Code §129.100] (Compliance demonstration and recordkeeping requirements.)	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 127.441.] The permittee shall keep records of: (a) polypropylene production on a monthly basis and as a 12-month rolling sum; (b) silo operating hours on a monthly basis	Production and silo hours are tracked monthly; a 12-month rolling sum production rate is calculated and compared to the production limit. VOC emissions calculated using November 2011 Plant 2 storage silos stack test results.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101A - PLANT 1, THREE STORAGE	Section D - VII. Additional	The silos are not subject to the provisions of 40 CFR 60 Subpart DDD, as per the definition of 'commenced' in 40 CFR §60.2, and	Statement of law not	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>SILOS</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]</p> <p>(Applicability and designation of affected facilities.)</p>	<p>Requirements</p>	<p>the applicability specified in 40 CFR §60.560(b)(1)(ii).</p>	<p>amenable to certification.</p>	<p><input type="checkbox"/> Interimittent</p>
<p>101B - PLANT 2, THREE STORAGE SILOS</p> <p>[25 Pa. Code §123.13]</p> <p>(Processes)</p>	<p>Section D - I. Restrictions - Emission Restriction(s)</p>	<p>No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.</p>	<p>Based on emissions calculations using the design specifications in the permit application, the particulate matter emissions do not exceed 0.04 grains per dry standard cubic foot.</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Interimittent</p>
<p>101B - PLANT 2, THREE STORAGE SILOS</p> <p>[25 Pa. Code §127.441]</p> <p>(Operating permit terms and conditions.)</p>	<p>Section D - I. Restrictions - Emission Restriction(s)</p>	<p>(a) Particulate Matter (PM/PM10) emissions from Plant No.2 shall be less than 7.10 tons per 12-month rolling sum.</p> <p>(b) Polypropylene Plant Number 2 consists of:</p> <p>Source ID 101B - Three Storage Silos</p> <p>Source ID 102B - Polypropylene Mfg. Sources</p> <p>Source ID 103B - Fugitive Sources</p>	<p>Particulate matter emissions for the 101B silos are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 7.10 ton per 12 month rolling sum emission limit.</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Interimittent</p>
<p>101B - PLANT 2, THREE STORAGE SILOS</p> <p>[25 Pa. Code</p>	<p>Section D - I. Restrictions - Emission Restriction(s)</p>	<p>[Additional authority of this permit condition is also derived from 25 Pa. Code §127.512.]</p> <p>VOC emissions from the silos under this source identification</p>	<p>VOC emissions for the 101B silos are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Interimittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
\$129.99] (Alternative RACT proposal and petition for alternative compliance schedule.)		shall not exceed 1.06 pounds per hour and 4.64 tons per year as 12-month rolling sum. Note: Compliance with the hourly emission limit was demonst...	determined and compared against the 1.06 lb/hr and 4.64 ton per 12 month rolling sum emission limit.	
101B - PLANT 2, THREE STORAGE SILOS [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560] (Applicability and designation of affected facilities.)	Section D - I. Restrictions - Emission Restriction(s)	The Total Organic Compound (TOC) from the silo's stack shall be less than 0.10 percent by weight. Note: Compliance with this TOC limit was demonstrated in a stack test in May, 2017. Review of the test procedures and results by the Department's Source Test Group is pending. Depending on the results o...	A representative test was conducted on 11/22/2011 of source 101B which demonstrates this requirement.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101B - PLANT 2, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Throughput Restriction(s)	Polypropylene production from Plant 2 shall not exceed 595,680,000 pounds per 12-month rolling sum.	Production is tracked monthly, a 12-month rolling sum production rate is calculated and compared to the production limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101B - PLANT 2, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit Terms and Conditions.)	Section D - II. Testing Requirements	[Additional authority for these conditions is derived from 40 CFR §60.564.] (a) As per 40 CFR §60.564(a)(1), whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is an addition of a control device, the permittee	Changes such as production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment, are	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
terms and conditions.)		shall determine compliance with the 40 ...	documented within the facility's Management of Change records. Performance test results are maintained in the facility environmental files.	
101B - PLANT 2, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is from 25 Pa. Code Section 129.100.] The permittee shall monitor the loading (polypropylene production) and hours of operation of the silos on a monthly basis.	Production and silo hours are tracked monthly; a 12- month rolling sum production rate is calculated and compared to the production limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101B - PLANT 2, THREE STORAGE SILOS [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is from 25 Pa. Code Section 129.100.] The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and a...	Emissions for the 101B silos are calculated monthly and as a 12 month rolling sum using approved emission calculation methodologies.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101B - PLANT 2, THREE STORAGE SILOS [25 Pa. Code §129.100] (Compliance demonstration and recordkeeping requirements.)	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 127.441.] The permittee shall keep records of: (a) polypropylene production on a monthly basis and as a 12- month rolling sum;	Production and silo hours are tracked monthly; a 12- month rolling sum production rate is calculated and compared to the production limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
101B - PLANT 2, THREE STORAGE SILOS [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)	Section D - IV, Recordkeeping Requirements	(b) silo operating hours on a monthly basis (a) As per 40 CFR §60.565(a)(10), the permittee shall keep an up-to-date, readily-accessible record of each process operating variable that may result in an increase in the uncontrolled annual emissions or the TOC weight percent, should such operating variable be changed. (b) As per 40 CFR §60.565(...	Facility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of this Permit. Changes are documented within the facility's Management of Change records.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
101B - PLANT 2, THREE STORAGE SILOS [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)	Section D - V, Reporting Requirements	As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports of any change in process operation that increases the uncontrolled annual emissions or the VOC weight percent of the individual stream, as recorded in 40 CFR §60.565(h).	Facility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of this Permit. Changes are documented within the facility's Management of Change records. Applicable changes would be submitted in the noted semiannual report.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit	Section D - I, Restrictions - Emission Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] (a) The total Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No. 1 shall be less than 37.10 tons per year on a 12-month rolling sum.	Emissions for the 102A sources are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 37.1 ton VOC	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
terms and conditions.)		(b) Particulate Matter (PM/PM10) emissions f...	limit and 7.1 ton PM limit per 12 month rolling sum.	
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Throughput Restriction(s)	Polypropylene production for this plant shall not exceed 595,680,000.00 pounds per 12-month rolling sum.	Production is tracked monthly; a 12-month rolling sum production rate is calculated and compared to the production limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1] (Standards: Process emissions.)	Section D - I. Restrictions - Control Device Efficiency Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h) and 25 Pa. Code §129.99.] (a) As per 40 CFR §§60.18(c), and 60.562-1(a)(1)(i)(C), the continuous and intermittent emission streams from the process shall be vented and combusted in the flare that is: (1...	Facility has work practices and procedures in place in accordance with applicable regulatory and as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process. Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored. Process control systems in place that both alarm and automatically re-ignite flare	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>pilots as needed.</p> <p>There were three instances in this reporting period where the indications from all three flare pilot instruments were showing failure. These instances occurred on 3/4/18, 4/5/18 and 11/28/18.</p> <p>Performed weekly observations (modified Method 22) using "Odor and Fugitive Emissions" inspection form submitted to the Department on 4/16/2009. Additionally, at the flare, an automated system is in place to measure the propensity of the flame to smoke and add steam to mitigate smoking.</p> <p>The facility suffered a complete loss of steam supply from the utility provider on 3/22/18. This event caused significant portions of the facility to immediately cease operation in accordance with safe operating procedures. At the initial onset of this event there may have been visible emissions at the flare in</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>102A - PLANT 1 POLYPROPYLENE MFG SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.564]</p> <p>(Test methods and</p>	<p>Section D - II. Testing Requirements</p>	<p>[Additional authority for this permit condition is from 25 Pa. Code 127.441.]</p> <p>(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures specified in 4...</p>	<p>excess of five minutes.</p> <p>The facility measures flare BTU value using a flare gas analyzer.</p> <p>All other flare operating requirements were in the normal operating range. Flare instrumentation and alarms continue to be calibrated and monitored on an established frequency.</p> <p>Flare exit velocity is measured using a dedicated flare flow meter. Facility records are maintained for the net heating value and the exit velocity.</p> <p>Braskem America has chosen to comply with the car seal option to prevent vent streams from bypassing the flare.</p> <p>There were no performance tests conducted during the compliance review period.</p>	<p><input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	The permittee shall monitor the following: (a) the hours of operation of the plant on a monthly basis, and (b) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions calculations (c) the polypropylene production on a monthly basis and ...	Production and emission data are tracked monthly in accordance with department approved methodologies.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.563] (Monitoring requirements.)	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100 and 40 CFR §§ 60.18 and 64.3.] (a) As per 40 CFR §60.563(a)(2) and (3), the permittee shall calibrate, maintain, and operate according to manufacturer's specifications the monitoring ...	The thermocouples on the flare monitoring for the presence of a pilot flame and flare flame detector were installed, calibrated, maintained, and operated according to manufacturer's specifications and/or good engineering practices. Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored. Flare is part of the operator surveillance program and is inspected and maintained as part of plant turnaround work practices. Braskem America, Inc. has chosen to comply with the car seal option. A monthly	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein. (a) The permittee shall calculate emissions of (1) ...	Production and emission data are tracked monthly and on a 12 month rolling sum in accordance with department approved methodologies.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	The permittee shall record the following: (a) the design exhaust air flow rate (scfm) for the elutriator baghouses, (b) the hours of operation of the plant on a monthly basis, and (c) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emis...	Production and emission data are tracked monthly and on a 12 month rolling sum in accordance with department approved methodologies.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100.] (a) As per 40 CFR §60.565(a)(3), the permittee shall keep an up-to-date, readily-accessible record of the following information measured during each flare performance test, and shall...	The following records are available in the performance test (5/17/2017): All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations; continuous records of the pilot flame and records of all periods of operations during which the pilot flame is absent.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
requirements.)			Control device was operating continuously during the performance test. Records associated with the facility car seal program and flare flame instrumentation are maintained and retained in accordance with applicable requirements. Changes such as production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment, are documented within the facility's Management of Change records. Performance test results are maintained in the facility environmental files	
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511] (b) As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports, due by March 1 and September 1 each year, of the following recorded information. (a) All periods recorded under...	Facility has submitted semiannual reports required under this condition.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
recordkeeping requirements.)				
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560] (Applicability and designation of affected facilities.)	Section D - VII. Additional Requirements	Emergency vent streams, as defined in 40 CFR §60.561, are exempt from the requirements of 40 CFR 60.562-1(a)(2) as per 40 CFR §60.560(h).	Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102B - PLANT 2 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Emission Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] (a) The combined Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis. (b) The combined Particulate Mat...	VOC and PM emissions for the 102B sources are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 24.3 ton VOC and 7.1 ton PM per 12 month rolling sum emission limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102B - PLANT 2 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Throughput Restriction(s)	Polypropylene production for this plant shall not exceed 595,680,000.00 pounds per 12-month rolling sum.	Production is tracked monthly; a 12-month rolling sum production rate is calculated and compared to the production limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>102B - PLANT 2 POLYPROPYLENE MFG SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]</p> <p>(Standards: Process emissions.)</p>	<p>Section D - I. Restrictions - Control Device Efficiency Restriction(s)</p>	<p>[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h) and 25 Pa. Code §129.99.]</p> <p>(a) As per 40 CFR §§60.18(c), and 60.562-1(a)(1)(i)(C), the continuous and intermittent emission streams from the process shall be vented and combusted in the flare that is:</p> <p>(1...</p>	<p>Facility has work practices and procedures in place in accordance with applicable regulatory and as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations reported via routine "Odor and visible emission inspections" and the facility's total event reporting process.</p> <p>Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored. Process control systems in place that both alarm and automatically re-ignite flare pilots as needed.</p> <p>There were three instances in this reporting period where the indications from all three flare pilot instruments were showing failure. These instances occurred on 3/4/18, 4/5/18 and 11/28/18.</p> <p>Performed weekly observations (modified</p>	<p><input type="checkbox"/> Continuous</p> <p><input checked="" type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>Method 22) using "Odor and Fugitive Emissions" inspection form submitted to the Department on 4/16/2009. Additionally, at the flare, an automated system is in place to measure the propensity of the flame to smoke and add steam to mitigate smoking.</p> <p>The facility suffered a complete loss of steam supply from the utility provider on 3/22/18. This event caused significant portions of the facility to immediately cease operation in accordance with safe operating procedures. At the initial onset of this event there may have been visible emissions at the flare in excess of five minutes.</p> <p>The facility measures flare BTU value using a flare gas analyzer.</p> <p>All other flare operating requirements were in the normal operating range. Flare instrumentation and alarms continue to be calibrated and monitored on an established frequency.</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
102B - PLANT 2 POLYPROPYLENE MFG SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.564] (Test methods and procedures.)	Section D - II. Testing Requirements	[Additional authority for this permit condition is from 25 Pa. Code 127.441.] (a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures specified in 4...	There were no performance tests conducted during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102B - PLANT 2 POLYPROPYLENE MFG SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	The permittee shall monitor the following: (a) the hours of operation of the plant on a monthly basis, and (b) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions calculations (c) the polypropylene production on a monthly basis and ...	Production and emission data are tracked monthly in accordance with department approved methodologies.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
102B - PLANT 2 POLYPROPYLENE	Section D - III. Monitoring	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100 and 40 CFR	The thermocouples on the flare monitoring for the	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>MFG SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.563]</p> <p>(Monitoring requirements.)</p>	<p>Requirements</p>	<p>§§ 60.18 and 64.3.]</p> <p>(a) As per 40 CFR §60.563(a)(2) and (3), the permittee shall calibrate, maintain, and operate according to manufacturer's specifications the monitoring ...</p>	<p>presence of a pilot flame and flare flame detector were installed, calibrated, maintained, and operated according to manufacturer's specifications and/or good engineering practices.</p> <p>Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored.</p> <p>Flare is part of the operator surveillance program and is inspected and maintained as part of plant turnaround work practices.</p> <p>Braskem America, Inc. has chosen to comply with the car seal option. A monthly car seal inspection program is in place.</p>	<p><input type="checkbox"/> Intermittent</p>
<p>102B - PLANT 2 POLYPROPYLENE MFG SOURCES</p> <p>[25 Pa. Code §127.441]</p> <p>(Operating permit terms and conditions.)</p>	<p>Section D - IV. Recordkeeping Requirements</p>	<p>The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein.</p> <p>(a) The permittee shall calculate emissions of</p>	<p>Production and emission data are tracked monthly and on a 12 month rolling sum in accordance with department approved methodologies.</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
102B - PLANT 2 POLYPROPYLENE MFG SOURCES	Section D - IV. Recordkeeping Requirements	(1) ... The permittee shall record the following: (a) the design exhaust air flow rate (scfm) for the elutriator baghouses, (b) the hours of operation of the plant on a monthly basis, and (c) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emiss...	Production and emission data are tracked monthly and on a 12 month rolling sum in accordance with department approved methodologies.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[25 Pa. Code §127.441] (Operating permit terms and conditions.)				
102B - PLANT 2 POLYPROPYLENE MFG SOURCES	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100.]	The following records are available in the performance test (5/17/2017): All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations; continuous records of the pilot flame and records of all periods of operations during which the pilot flame is absent. Control device was operating continuously during the performance test.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)		(a) As per 40 CFR §60.565(a)(3), the permittee shall keep an up-to-date, readily-accessible record of the following information measured during each flare performance test, and shal...	Records associated with the facility car seal program and flare flame instrumentation are maintained and retained in accordance with applicable requirements. Changes such as production capacity,	

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Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
102B - PLANT 2 POLYPROPYLENE MFG SOURCES	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]	feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment, are documented within the facility's Management of Change records. Performance test results are maintained in the facility environmental files	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)		(b) As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports, due by March 1 and September 1 each year, of the following recorded information. (a) All periods recorded under...	Facility has submitted semiannual reports required under this condition.	
102B - PLANT 2 POLYPROPYLENE MFG SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560] (Applicability and designation of	Section D - VII. Additional Requirements	Emergency vent streams, as defined in 40 CFR §60.561, are exempt from the requirements of 40 CFR 60.562-1(a)(2) as per 40 CFR §60.560(h).	Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
103A - PLANT 1 FUGITIVE SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Emission Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] (a) The total Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No. 1 shall be less than 37.10 tons per year on a 12-month rolling sum. (b) Particulate Matter (PM/PM10) emissions f...	Facility has a leak detection and repair program (work practice) to limit fugitive emissions. VOC emissions for the 103A sources are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 37.1 ton VOC and 7.1 ton PM 12 month rolling sum emission limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Emission Restriction(s)	The Volatile Organic Compounds (VOC) emissions from the fugitive emission sources of Plant 1 shall not exceed 19.60 tons per year on a twelve (12) month rolling basis.	Facility has a leak detection and repair program (work practice) to limit fugitive emissions. VOC emissions for the 103A sources are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 19.6 ton 12 month rolling sum emission limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of	Section D - II. Testing Requirements	[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.] (a) In conducting the performance tests required in 40 CFR	There were no performance tests required under 40 CFR 60.8 for this source during this compliance review period; thus this requirement is	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>Performance for New Stationary Sources §40 CFR 60.485]</p> <p>(Test methods and procedures.)</p>		<p>\$60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other metho...</p>	<p>not amenable to certification during this compliance review period.</p> <p>The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the presence of leaking sources. The contractor has work practices in place to ensure proper calibration gases are use as described in this requirement.</p> <p>The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the background level. All potential leak interfaces are traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicates by the instrument and the background level is compared with 500 ppm for determining compliance.</p> <p>For equipment that is added, engineering</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>Judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.</p> <p>Through periodic review and evaluation any components that are discovered which require to be added to the LDAR program are included in the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.</p> <p>There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review period.</p>	
<p>103A - PLANT 1 FUGITIVE SOURCES</p> <p>[25 Pa. Code §127.441]</p> <p>(Operating permit terms and</p>	<p>Section D - III. Monitoring Requirements</p>	<p>[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511.]</p> <p>(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis</p>	<p>Polypropylene production is monitored monthly. Facility has a leak detection and repair program (work practice) to limit fugitive emissions. 12-month rolling summation of VOC</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermittent</p>

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Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
conditions.)		(b) Monitoring of components shall be conducted in accordance with 40 CFR Part 60 Subpart VV.	emissions are kept on file.	
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2] (Standards: Pumps in light liquid service.)	Section D - III. Monitoring Requirements	(c) T... [Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7] (Standards: Valves in gas/vapor service and in light liquid service.)	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in ...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. All leaks were repaired within 15 calendar days or placed on delay of repair.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES	Section D - IV. Recordkeeping Requirements	The permittee shall keep records of	Polypropylene production is monitored monthly. 12-month rolling	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
[25 Pa. Code §127.441] (Operating permit terms and conditions.)		(a) polypropylene production monthly and as a 12-month rolling sum; (b) VOC emissions monthly and as a 12-month rolling sum. (c) The LDAR component monitoring.	summation of VOC emissions are kept on file.	
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486] (Recordkeeping requirements.)	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] (a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486. (2) The permittee may comply with the recordkeeping requirements for the sources in one record...	This condition imposes no additional requirements than those conditions elsewhere in this Section. Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program Facility has work practices and procedures in place, including marked-up P&IDs showing equipment in VOC service, as well as equipment not in VOC service.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] (a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR	Facility submitted semiannual reports as required by this condition This is a historical requirement and imposes no specific requirements	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
New Stationary Sources §40 CFR 60.487] (Reporting requirements.)		\$60.486: (1) Process unit identification. (2) For each month duri...	during the current period. There were no performance tests conducted during the compliance review period.	<input checked="" type="checkbox"/> Continuous
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1] (Standards: General.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§60.482-1 through 60.482-10 or §60.480(e) for all equipment. (b) Compliance with 40 CFR §§60.482-1 to...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10] (Standards: Closed vent systems and control devices.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10. (b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §... \$...	Except as reported and submitted in this compliance certification or previous semi-annual deviation reports required by this permit, the flare is operated and maintained in compliance with 40 CFR 60.18. Flare is part of the operator surveillance program and is inspected and maintained as part of plant turnaround work practices. The closed vent	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>system is part of the facility LDAR Program. Inspections under the facility's mechanical integrity program were conducted during this compliance review period. The closed vent system is in continuous operations when emissions may be vented through it.</p> <p>All other flare operating requirements were in the normal operating range. Flare instrumentation and alarms continue to be calibrated and monitored on an established frequency.</p>	
<p>103A - PLANT 1 FUGITIVE SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3]</p> <p>(Compressors.)</p>	<p>Section D - VI. Work Practice Standards</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1...</p>	<p>Except for compressors which are controlled by 40 CFR § 60.482-10; and compressors that have no detectable emissions and are subject to 40 CFR 60.482-3(i), all remaining compressors are either equipped with a barrier fluid system that prevents leakage of VOC to the atmosphere or are vented to a control device.</p> <p>The AC compressors are operated with the barrier fluid at a pressure greater than the compressor</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>stuffing box pressure.</p> <p>The barrier fluid systems are in heavy liquid service (mineral oil).</p> <p>The barrier fluid systems are equipped with a sensor (low oil level) that will detect failure of the seal system and/or the barrier fluid system.</p> <p>The barrier fluid systems are equipped with alarms to indicate failure of the seal system and/or the barrier fluid system. The criterion used to indicate failure of the seal system is a low oil level alarm.</p> <p>(f) Statement of law that impose no compliance obligations and are thus not amenable to certification</p> <p>Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.</p> <p>The (2) Sulzer compressors (vent recovery) are closed system and vent to the flare and are therefore</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4] (Standards: Pressure relief devices in gas/vapor service.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than...	exempt from the requirements of paragraphs (a) and (b) of this condition. The facility did not exempt any compressors based on this condition during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermitent
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5] (Standards: Pressure relief devices in gas/vapor service.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c). (b) E...	Sampling connection systems are equipped with a closed purge system. The closed purge system is designed to capture and transport the purged fluid to a control device. The facility did not exempt any sampling systems based on this condition during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermitent

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Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6] (Standards: Open- ended valves or lines.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e). (2...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. Observed open-ended line on compressor equipment on 6/11/18 that was not equipped with a cap, blind flange, plug, or second valve.	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8] (Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. All leaks were repaired within 15 calendar days or placed on delay of repair.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Delay of repair of equipment for which leaks have been	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
Performance for New Stationary Sources §40 CFR 60.482-9] (Standards: Delay of repair.)		detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this e...	Program. (b) Statement of law that impose no compliance obligations and are thus not amenable to certification	
103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-2] (Standards: Equipment leaks of VOC.)	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.] (a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10. (b) As per 40 CFR §60.562-2(d), the per...	This is a historical requirement and imposes no specific requirements during the current period. LDAR program was instituted at startup. The facility adheres to LDAR work practice for recordkeeping and reporting consistent with 40 CFR 60.485, 60.486, and 60.487.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103B - PLANT 2 FUGITIVE SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - I. Restrictions - Emission Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] (a) The combined Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis. (b) The combined Particulate Matt...	VOC and PM emissions for the 103B sources are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 24.3 ton and 7.1 ton per 12 month rolling sum emission limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

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Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>103B - PLANT 2 FUGITIVE SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485]</p> <p>(Test methods and procedures.)</p>	<p>Section D - II. Testing Requirements</p>	<p>[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.]</p> <p>(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other metho...</p>	<p>There were no performance tests required under 40 CFR 60.8 for this source during this compliance review period; thus this requirement is not amenable to certification during this compliance review period.</p> <p>The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the presence of leaking sources. The contractor has work practices in place to ensure proper calibration gases are use as described in this requirement.</p> <p>The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the background level. All potential leak interfaces are traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicates by the instrument and the background level is</p>	<p><input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>compared with 500 ppm for determining compliance.</p> <p>For equipment that is added, engineering judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.</p> <p>Through periodic review and evaluation any components that are discovered which require to be added to the LDAR program are included in the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.</p> <p>There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review period.</p>	
103B - PLANT 2 FUGITIVE	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511.]	Polypropylene production is monitored monthly. Facility has a leak	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>SOURCES</p> <p>[25 Pa. Code §127.441]</p> <p>(Operating permit terms and conditions.)</p>		<p>(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis</p> <p>(b) Monitoring of components shall be conducted in accordance with 40 CFR Part 60 Subpart VV.</p> <p>(c) T...</p>	<p>detection and repair program (work practice) to limit fugitive emissions. 12-month rolling summation of VOC emissions are kept on file.</p>	<p><input type="checkbox"/> Interimittent</p>
<p>103B - PLANT 2 FUGITIVE SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]</p> <p>(Standards: Pumps in light liquid service.)</p>	<p>Section D - III. Monitoring Requirements</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and...</p>	<p>Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Interimittent</p>
<p>103B - PLANT 2 FUGITIVE SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7]</p> <p>(Standards: Valves in gas/vapor service</p>	<p>Section D - III. Monitoring Requirements</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in ...</p>	<p>Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.</p> <p>All leaks were repaired within 15 calendar days or placed on delay of repair.</p> <p>(e) Statement of law that imposes no compliance</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Interimittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
and in light liquid service.)			obligations and is thus not amenable to certification.	
103B - PLANT 2 FUGITIVE SOURCES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	The permittee shall keep records of (a) polypropylene production monthly and as a 12-month rolling sum; (b) VOC emissions monthly and as a 12-month rolling sum. (c) The LDAR component monitoring.	Polypropylene production is monitored monthly. 12-month rolling summation of VOC emissions are kept on file.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486] (Recordkeeping requirements.)	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] (a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486. (2) The permittee may comply with the recordkeeping requirements for the sources in one record...	This condition imposes no additional requirements than those conditions elsewhere in this Section. Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program Facility has work practices and procedures in place, including marked-up P&IDs showing equipment in VOC service, as well as equipment not in VOC service. Statement of law that impose no compliance obligations and are thus not amenable to	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487] (Reporting requirements.)	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] (a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR §60.486: (1) Process unit identification. (2) For each month dur...	certification during this compliance review period Facility submitted semiannual reports as required by this condition This is a historical requirement and imposes no specific requirements during the current period. There were no performance tests conducted during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1] (Standards: General.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§60.482-1 through 60.482-10 or §60.480(e) for all equipment. (b) Compliance with 40 CFR §§60.482-1 to...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Except as reported and submitted in this compliance certification or previous semi-annual deviation reports required	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
Standards of Performance for New Stationary Sources §40 CFR 60.482-10] (Standards: Closed vent systems and control devices.)		(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10. (b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §...	by this permit, the flare is operated and maintained in compliance with 40 CFR 60.18. Flare is part of the operator surveillance program and is inspected and maintained as part of plant turnaround work practices. The closed vent system is part of the facility LDAR Program. Inspections under the facility's mechanical integrity program were conducted during this compliance review period. The closed vent system is in continuous operations when emissions may be vented through it. All other flare operating requirements were in the normal operating range. Flare instrumentation and alarms continue to be calibrated and monitored on an established frequency.	
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Except for compressors which are controlled by 40 CFR § 60.482-10; and compressors that have no detectable emissions and are subject to 40 CFR 60.482-3(i), all remaining compressors are either equipped with a barrier	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
60.482-3] (Compressors.)			<p>fluid system that prevents leakage of VOC to the atmosphere or are vented to a control device.</p> <p>The AC compressors are operated with the barrier fluid at a pressure greater than the compressor stuffing box pressure.</p> <p>The barrier fluid systems are in heavy liquid service (mineral oil).</p> <p>The barrier fluid systems are equipped with a sensor (low oil level) that will detect failure of the seal system and/or the barrier fluid system.</p> <p>The barrier fluid systems are equipped with alarms to indicate failure of the seal system and/or the barrier fluid system. The criterion used to indicate failure of the seal system is a low oil level alarm.</p> <p>(f) Statement of law that impose no compliance obligations and are thus not amenable to certification</p> <p>Facility has work practices and procedures in place, including VOC monitoring</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>reports maintained as part of the facility LDAR Program.</p> <p>The (2) Sulzer compressors (vent recovery) are closed system and vent to the flare and are therefore exempt from the requirements of paragraphs (a) and (b) of this condition.</p> <p>The facility did not exempt any compressors based on this condition during the compliance review period.</p>	
<p>103B - PLANT 2 FUGITIVE SOURCES</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]</p> <p>(Standards: Pressure relief devices in gas/vapor service.)</p>	<p>Section D - VI. Work Practice Standards</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than...</p>	<p>Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.</p> <p>All leaks were repaired within 5 calendar days or placed on delay of repair.</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermitent</p>
<p>103B - PLANT 2 FUGITIVE SOURCES</p> <p>[40 CFR Part 60 Standards of</p>	<p>Section D - VI. Work Practice Standards</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a) Each sampling connection system shall be equipped with a</p>	<p>Sampling connection systems are equipped with a closed purge system.</p> <p>The closed purge system is designed to capture and</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermitent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
Performance for New Stationary Sources §40 CFR 60.482-5] (Standards: Sampling connection systems.)		closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c). (b) E...	transport the purged fluid to a control device. The facility did not exempt any sampling systems based on this condition during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6] (Standards: Open-ended valves or lines.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e). (2...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8] (Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. (b) Statement of law that impose no compliance obligations and are thus not amenable to certification Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
service, and connectors.)			of the facility LDAR Program. All leaks were repaired within 15 calendar days or placed on delay of repair.	
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9] (Standards: Delay of repair.)	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this e...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. (b) Statement of law that impose no compliance obligations and are thus not amenable to certification Facility has not chosen to utilize this exemption for repair during this compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
103B - PLANT 2 FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-2] (Standards: Equipment leaks of VOC.)	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.] (a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10. (b) As per 40 CFR §60.562-2(d), the per...	This is a historical requirement and imposes no specific requirements during the current period. LDAR program was instituted at startup. Facility has chosen not to elect this option during the current compliance period. Facility has chosen not to apply for a determination of equivalency during the current compliance period. The facility adheres to	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
105 - MAINTENANCE PARTS WASHER [25 Pa. Code §129.63] (Degreasing operations)	Section D - I. Restrictions - Emission Restriction(s)	(a) The permittee shall not use any solvent with a vapor degreaser of 1.0 millimeter of mercury (mmHg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs. (b) Paragraph (a) does not apply: (i) To cold cleaning machines used in extreme cleaning ...	LDAR work practice for recordkeeping and reporting consistent with 40 CFR 60.486 and 60.487. Facility maintains MSDS's for the material used in this equipment which demonstrates the adherence to the vapor pressure and VOC content requirements. Facility uses a liquid that contains less than 5% VOCs to comply with these requirements	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
105 - MAINTENANCE PARTS WASHER [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	The permittee shall monitor and record the solvent usage on a monthly basis.	Records of the MSDS and waste manifest are maintained onsite. Facility uses a liquid that contains less than 5% VOCs to comply with these requirements	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
105 - MAINTENANCE PARTS WASHER [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	The permittee shall keep records of: (a) Monthly solvent usage; (b) VOC emissions on a monthly and 12-month rolling sum basis.	This information has been provided by the material supplier. Facility maintains MSDS's for the material used in this equipment which demonstrates the adherence to the vapor pressure and VOC content requirements. Facility uses a liquid that contains less	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
105 - MAINTENANCE PARTS WASHER [25 Pa. Code §129.63] (Degreasing operations)	Section D - IV, Recordkeeping Requirements	The permittee shall maintain records of: (a) an invoice, (b) a bill of sale, (c) a certificate that corresponds to a number of sales, (d) a Safety Data Sheet (SDS), or (e) other appropriate documentation acceptable to the Department may be used to comply with 25 Pa. Code 129.63.	Facility operates this equipment in accordance with these requirements through equipment labeling and operating procedures. Facility uses a liquid that contains less than 5% VOCs to comply with these requirements	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
105 - MAINTENANCE PARTS WASHER [25 Pa. Code §129.63] (Degreasing operations)	Section D - VI. Work Practice Standards	A person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information: (i) The name and address of the solvent supplier. (ii) The type of solvent including the product or vendor identi...	This information has been provided by the solvent supplier. Facility maintains MSDS's for the material used in this equipment which demonstrates the adherence to the vapor pressure and VOC content requirements. Facility uses a liquid that contains less than 5% VOCs to comply with these requirements	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
105 - MAINTENANCE PARTS WASHER [25 Pa. Code §129.63] (Degreasing operations)	Section D - VI. Work Practice Standards	(1) Immersion cold cleaning machines shall have a freeboard ratio of 0.50 or greater. (2) Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:	Facility operates this equipment in accordance with these requirements through equipment labeling and operating procedures. Facility uses a liquid that contains less than 5% VOCs to comply	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
operations)		(i) Have a permanent, conspicuous label summarizing the operating requirements in paragraph (3). In addit...	with these requirements	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1] (Standards: Process emissions.)	Section D - I. Restrictions - Control Device Efficiency Restriction(s)	[Additional authority of this permit is also derived from 25 Pa. Code §129.99.] (a) As per 40 CFR §60.562-1(a) and (d), vent stream emissions from this source shall be directed to Sunoco Flare (Source ID C100) that shall be operated in compliance with the requirements specified in 40 CFR §60.18 at ...	Source emissions were directed to this control device during this period as evidenced by facility instrumentation. Braskem has confirmed that the SXL flare was operating in accordance with these requirements during this reporting period other than events listed in this report. Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/11/18, 6/29/18, and 12/24/18) during this reporting period.	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR	Section D - II. Testing Requirements	[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.] (a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other metho...	There were no performance tests required under 40 CFR 60.8 during this compliance review period; thus this requirement is not amenable to certification during this compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
60.485] (Test methods and procedures.)			<p>The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the presence of leaking sources. The contractor has work practices in place to ensure proper calibration gases are use as described in this requirement.</p> <p>The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the background level. All potential leak interfaces are traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicates by the instrument and the background level is compared with 500 ppm for determining compliance.</p> <p>Through periodic review and evaluation any components that are discovered which require to be added to the LDAR program are included in</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.</p> <p>For equipment that is added, engineering judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.</p> <p>There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review period.</p>	
<p>106 - PROPYLENE SPLITTER PROCESS & CAVERN 4</p> <p>[25 Pa. Code §127.441]</p> <p>(Operating permit terms and conditions.)</p>	<p>Section D - III. Monitoring Requirements</p>	<p>[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511.]</p> <p>(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.</p> <p>(b) Monitoring of components shall be conducted in accordance with 40 CFR Part 60 Subpart VV.</p>	<p>Polypropylene production is monitored monthly. Facility has a leak detection and repair program (work practice) to limit fugitive emissions. 12-month rolling summation of VOC emissions are kept on file.</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2] (Standards: Pumps in light liquid service.)	Section D - III. Monitoring Requirements	(c) ... [Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program Facility is not claiming an exemption under this condition (d), thus this is not amenable to certification during this compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7] (Standards: Valves in gas/vapor service and in light liquid service.)	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in ...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. All leaks were repaired within 15 calendar days or placed on delay of repair. (e) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Through periodic review and evaluation any components that are discovered which require to be added to the LDAR	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511] The permittee shall keep the following records. (a) the polypropylene production on a monthly and on a 12-month rolling basis. (b) LDAR component monitoring (c) the VOC emissions on a monthly and on a 12-m...	program are included in the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components. Polypropylene production is monitored monthly. 12-month rolling summation of VOC emissions are kept on file.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486] (Recordkeeping	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] (a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486. (2) The permittee may comply with the recordkeeping requirements for the sources in one record...	This condition imposes no additional requirements than those conditions elsewhere in this Section. Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program Facility has work practices and procedures in place,	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
requirements.)			including marked-up P&IDs showing equipment in VOC service, as well as equipment not in VOC service. Statement of law that impose no compliance obligations and are thus not amenable to certification during this compliance review period	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)	Section D - IV. Recordkeeping Requirements	[Additional authority of this permit is also derived from 25 Pa. Code §129.100.] (a) As per 40 CFR §60.565(b)(2), the permittee shall keep the following records for vent system containing valves that could divert the emission stream away from the flare: (1) All periods when flow is indicated if fl...	Braskem America, Inc. has chosen to comply with the car seal option. A monthly car seal inspection program is in place. Changes such as production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment, are documented within the facility's Management of Change records. Performance test results are maintained in the facility environmental files.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] (a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR	Facility submitted semiannual reports as required by this condition This is a historical requirement and imposes no specific requirements	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
Performance for New Stationary Sources §40 CFR 60.487] (Reporting requirements.)		\$60.486: (1) Process unit identification. (2) For each month duri...	during the current period. There were no performance tests conducted during the compliance review period.	<input checked="" type="checkbox"/> Continuous
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)	Section D - V. Reporting Requirements	The permittee shall submit to DEP semiannual reports of all periods recorded under 40 CFR §60.565(b) when the vent stream has been diverted from the flare.	Braskem has submitted the applicable information in the semi-annual reports. No vent streams were diverted from the flare in this reporting period.	<input type="checkbox"/> Intermittent
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1] (Standards: General.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§60.482-1 through 60.482-10 or §60.480(e) for all equipment. (b) Compliance with 40 CFR §§60.482-1 to...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	current compliance period.	<input type="checkbox"/> Continuous
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]		(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10. (b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §...	Except as reported and submitted in Sunoco's compliance certification or previous semi-annual deviation reports, the Sunoco flare is operated and maintained in compliance with 40 CFR 60.18.	<input checked="" type="checkbox"/> Intermittent
(Standards: Closed vent systems and control devices.)			Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/1/18, 6/29/18, and 12/24/18) during this reporting period.	
			The closed vent system is part of the facility LDAR Program. Inspections under the facility's mechanical integrity program were conducted during this compliance review period. The closed vent system is in continuous operations when emissions may be vented through it.	
106 - PROPYLENE	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from	Except for compressors	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3] (Compressors.)		40 CFR §60.562-2(a) and 25 Pa. Code §129.71.1 (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1...	which are controlled by 40 CFR § 60.482-10; and compressors that have no detectable emissions and are subject to 40 CFR 60.482-3(i), all remaining compressors are either equipped with a barrier fluid system that prevents leakage of VOC to the atmosphere or are vented to a control device. (f) Statement of law that impose no compliance obligations and are thus not amenable to certification Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. The facility did not exempt any compressors based on this condition during the compliance review period.	<input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. All leaks were repaired within 5 calendar days or	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
Sources §40 CFR 60.482-4] (Standards: Pressure relief devices in gas/vapor service.)			placed on delay of repair.	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5] (Standards: Sampling connection systems.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c). (b) E...	Sampling connection systems are equipped with a closed purge system. The closed purge system is designed to capture and transport the purged fluid to a control device. The facility did not exempt any sampling systems based on this condition during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6] (Standards: Open-ended valves or lines.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e). (2...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>106 - PROPYLENE SPLITTER PROCESS & CAVERN 4</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8]</p> <p>(Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.)</p>	<p>Section D - VI. Work Practice Standards</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light...</p>	<p>Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.</p> <p>All leaks were repaired within 15 calendar days or placed on delay of repair.</p>	<p><input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>
<p>106 - PROPYLENE SPLITTER PROCESS & CAVERN 4</p> <p>[25 Pa. Code §127.441]</p> <p>(Operating permit terms and conditions.)</p>	<p>Section D - VII. Additional Requirements</p>	<p>The source consists the following equipment and associated vent emissions:</p> <p>Two (2) splitters and associated pre-treatment and post-treatment equipment</p> <p>Cavern #4</p> <p>Three (3) propylene dryers (V-54A, V54-B, and V-54C)</p>	<p>Statement of law that imposes no compliance obligations and is thus not amenable to certification.</p>	<p><input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>
<p>106 - PROPYLENE SPLITTER PROCESS & CAVERN 4</p> <p>[40 CFR Part 60 Standards of Performance for</p>	<p>Section D - VII. Additional Requirements</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically</p>	<p>Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.</p> <p>(b) Statement of law that</p>	<p><input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
New Stationary Sources §40 CFR 60.482-9] (Standards: Delay of repair.)		infeasible without a process unit shutdown. Repair of this e...	impose no compliance obligations and are thus not amenable to certification Facility has not chosen to utilize this exemption for repair during this compliance review period.	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-2] (Standards: Equipment leaks of VOC.)	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.] (a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10. (b) As per 40 CFR §60.562-2(d), the per...	This is a historical requirement and imposes no specific requirements during the current period. LDAR program was instituted at startup. Facility has chosen not to elect this option during the current compliance period. Facility has chosen not to apply for a determination of equivalency during the current compliance period. The facility adheres to LDAR work practice for recordkeeping and reporting consistent with 40 CFR 60.486 and 60.487.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [25 Pa. Code §127.441] (Operating permit terms and	Section D - I. Restrictions - Control Device Efficiency Restriction(s)	When the loading of rail cars with propylene occurs at this source, the air emissions shall be routed to a flare that meets the requirements of 40 CFR §60.18.	Source emissions were directed to this control device during this period as evidenced by facility instrumentation. Braskem has confirmed that the SXL flare was operating in	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
conditions.)			<p>accordance with these requirements during this reporting period other than events listed in this report.</p> <p>Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/11/18, 6/29/18, and 12/24/18) during this reporting period.</p>	
<p>107 - PROPYLENE UNLOADING RACK</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]</p> <p>(Standards: Process emissions.)</p>	<p>Section D - I. Restrictions - Control Device Efficiency Restriction(s)</p>	<p>[Additional authority of this permit is also derived from 25 Pa. Code §129.99.]</p> <p>(a) As per 40 CFR §60.562-1(a) and (d), vent stream emissions from this source shall be directed to Sunoco Flare (Source ID C100) that shall be operated in compliance with the requirements specified in 40 CFR §60.18 at ...</p>	<p>Source emissions were directed to this control device during this period as evidenced by facility instrumentation. Braskem has confirmed that the SXL flare was operating in accordance with these requirements during this reporting period other than events listed in this report.</p> <p>Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/11/18,</p>	<p><input type="checkbox"/> Continuous</p> <p><input checked="" type="checkbox"/> Intermittent</p>

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			6/29/18, and 12/24/18) during this reporting period. Braskem America has chosen to comply with the car seal option to prevent vent streams from bypassing the flare.	
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485] (Test methods and procedures.)	Section D - II. Testing Requirements	[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.] (a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other metho...	There were no performance tests required under 40 CFR 60.8 during this compliance review period; thus this requirement is not amenable to certification during this compliance review period. The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the presence of leaking sources. The contractor has work practices in place to ensure proper calibration gases are use as described in this requirement. The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
			<p>background level. All potential leak interfaces are traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicates by the instrument and the background level is compared with 500 ppm for determining compliance.</p> <p>Through periodic review and evaluation any components that are discovered which require to be added to the LDAR program are included in the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.</p> <p>For equipment that is added, engineering judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.</p> <p>There were no samples</p>	

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
107 - PROPYLENE UNLOADING RACK [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	The permittee shall monitor and record the amount of material loaded and unloaded each month.	collected during the current compliance period and thus, imposes no obligations during the current compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	(a) The permittee shall monitor each component in accordance 40 CFR Part 60 Subpart VV. (b) Fugitive VOC emissions shall be calculated using procedures and criteria approved by the Department. (c) VOC emissions from this source shall be calculated using mass balance and engineering estimates appro...	The amount of materials loaded and unloaded are tracked in a facility tracking spreadsheet.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program Facility is not claiming an exemption under this condition (d), thus this is	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
(Standards: Pumps in light liquid service.)			not amenable to certification during this compliance review period.	
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7] (Standards: Valves in gas/vapor service and in light liquid service.)	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in ...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. Through periodic review and evaluation any components that are discovered which require to be added to the LDAR program are included in the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components. All leaks were repaired within 15 calendar days or placed on delay of repair. (e) Statement of laws that imposes no compliance obligations and are thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [25 Pa. Code	Section D - IV. Recordkeeping Requirements	The permittee shall keep the following records:	The amount of materials loaded and unloaded are tracked in a facility	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>§127.441]</p> <p>(Operating permit terms and conditions.)</p>		<p>a. Number of loadings and unloadings on a monthly basis</p> <p>b. Amount of loaded and unloaded propane/propylene mixture on a monthly basis</p> <p>c. The emissions from the loading and unloading operations on a monthly basis and 12-month rolling sum.</p> <p>d. LDAR compo...</p>	<p>tracking spreadsheet.</p> <p>VOC emissions for the 107 source is calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined. Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.</p>	
<p>107 - PROPYLENE UNLOADING RACK</p> <p>[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]</p> <p>(Recordkeeping requirements.)</p>	<p>Section D - IV. Recordkeeping Requirements</p>	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]</p> <p>(a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.</p> <p>(2) The permittee may comply with the recordkeeping requirements for the sources in one record...</p>	<p>This condition imposes no additional requirements than those conditions elsewhere in this Section.</p> <p>Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program</p> <p>Facility has work practices and procedures in place, including marked-up P&IDs showing equipment in VOC service, as well as equipment not in VOC service.</p> <p>(h) Statement of laws that imposes no compliance obligations and are thus not amenable to</p>	<p><input checked="" type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Intermitent</p>

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)	Section D - IV. Recordkeeping Requirements	[Additional authority of this permit is also derived from 25 Pa. Code §129.100.] (a) As per 40 CFR §60.565(b)(2), the permittee shall keep the following records for vent system containing valves that could divert the emission stream away from the flare: (1) All periods when flow is indicated if fl...	Braskem America, Inc. has chosen to comply with the car seal option. A monthly car seal inspection program is in place. Changes such as production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment, are documented within the facility's Management of Change records. Performance test results are maintained in the facility environmental files.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487] (Reporting requirements.)	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] (a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR §60.486: (1) Process unit identification. (2) For each month dur...	Facility submitted semiannual reports as required by this condition This is a historical requirement and imposes no specific requirements during the current period. There were no performance tests conducted during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE	Section D - V. Reporting	The permittee shall submit to DEP semiannual reports of all periods recorded under 40 CFR §60.565(b) when the vent	Braskem has submitted the applicable information	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565] (Reporting and recordkeeping requirements.)	Requirements	stream has been diverted from the flare.	in the semi-annual reports. No vent streams were diverted from the flare in this reporting period.	<input type="checkbox"/> Interimittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1] (Standards: General.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interimittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10] (Standards: Closed	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Except as reported and submitted in Sunoco's compliance certification or previous semi-annual deviation reports, the Sunoco flare is operated and maintained in compliance with 40 CFR 60.18.	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Interimittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
vent systems and control devices.)		§...	<p>Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/11/18, 6/29/18, and 12/24/18) during this reporting period.</p> <p>The closed vent system is part of the facility LDAR Program. Inspections under the facility's mechanical integrity program were conducted during this compliance review period. The closed vent system is in continuous operations when emissions may be vented through it.</p>	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3] (Compressors.)	Section D - VI. Work Practice Standards	<p>[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]</p> <p>(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1...</p>	<p>Except for compressors which are controlled by 40 CFR § 60.482-10; and compressors that have no detectable emissions and are subject to 40 CFR 60.482-3(i), all remaining compressors are either equipped with a barrier fluid system that prevents leakage of VOC to the atmosphere or are vented</p>	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4] (Standards: Pressure relief devices in gas/vapor service.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	(f) Statement of law that impose no compliance obligations and are thus not amenable to certification Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. The facility did not exempt any compressors based on this condition during the compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interimittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4] (Standards: Pressure relief devices in gas/vapor service.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. All leaks were repaired within 5 calendar days or placed on delay of repair.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interimittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4] (Standards: Pressure relief devices in gas/vapor service.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Sampling connection systems are equipped with a closed purge system. The closed purge system is designed to capture and	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Interimittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
New Stationary Sources \$40 CFR 60.482-5] (Standards: Sampling connection systems.)		closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c). (b) E...	transport the purged fluid to a control device. The facility did not exempt any sampling systems based on this condition during the compliance review period.	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources \$40 CFR 60.482-6] (Standards: Open-ended valves or lines.)	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e). (2...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. Observed the design of several pressure relief valve piping configurations on equipment on 6/12/18 that was not equipped with a cap, blind flange, plug, or second valve which resulted in an Open Ended Line condition.	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources \$40 CFR 60.482-8] (Standards: Pumps and valves in heavy liquid service, pressure relief	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. All leaks were repaired within 15 calendar days or placed on delay of repair.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
devices in light liquid or heavy liquid service, and connectors.)				
107 - PROPYLENE UNLOADING RACK [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - VII. Additional Requirements	This source consists of compressors, pumps, loading racks, product storage, knockout pots, transfer lines, and associated equipment for purchased polymer grade propylene and purchased refinery grade propylene.	Statement of law that imposes no compliance obligations and is thus not amenable to certification.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9] (Standards: Delay of repair.)	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this e...	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program. (b) Statement of law that impose no compliance obligations and are thus not amenable to certification Facility has not chosen to utilize this exemption for repair during this compliance review period.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.] (a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.	This is a historical requirement and imposes no specific requirements during the current period. LDAR program was instituted at startup. Facility has chosen not to	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
60.562-2] (Standards: Equipment leaks of VOC.)		(b) As per 40 CFR §60.562-2(d), the per...	elect this option during the current compliance period. Facility has chosen not to apply for a determination of equivalency during the current compliance period.	
108 - FIRE WATER PUMP ENGINES [25 Pa. Code §123.21] (General)	Section D - I. Restrictions - Emission Restriction(s)	No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO ₂ , in the effluent gas exceeds 500 parts per million, by volume, dry basis.	Use of ultra-low sulfur diesel fuel at the facility ensures compliance with the emission limit.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640] (How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?)	Section D - I. Restrictions - Operating Hours Restriction(s)	The permittee must operate the emergency stationary RICE according to the requirements specified below as per 40 CFR §63.6640(f).	The facility tracks operating hours of each engine to confirm the uses are within guidelines.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
108 - FIRE WATER	Section D - III.	The permittee shall monitor and record the operating hours each	The facility tracks	<input checked="" type="checkbox"/> Continuous

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
PUMP ENGINES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Monitoring Requirements	time the engines are operated.	operating hours of each engine to confirm the uses are within guidelines.	<input type="checkbox"/> Intermittent
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories \$40 CFR 63.6625] (What are my monitoring, installation, operation, and maintenance requirements?)	Section D - III. Monitoring Requirements	The permittee must install a non-resettable hour meter.	Facility performs routine checks on engines and records operating hours.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
108 - FIRE WATER PUMP ENGINES [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	The permittee shall keep the following records each time the engines are operated: (a) The date (b) The reason(s) the engine was operated (c) Hours operated	The facility tracks operating hours of each engine to confirm the uses are within guidelines.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories \$40 CFR 63.6655]	Section D - IV. Recordkeeping Requirements	[Additional authority of this permit condition is also derived from 25 Pa. Code §129.100.] The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and maintained according to	The facility documents any maintenance performed to ensure the engines are following manufacturer's recommendations.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
(What records must I keep?)		owner's maintenance plan.		
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]	Section D - IV. Recordkeeping Requirements	(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.	The facility maintains necessary operating and maintenance records.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
(In what form and how long must I keep my records?)		(c) You...		
108 - FIRE WATER PUMP ENGINES [25 Pa. Code §129.97] (Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.)	Section D - VI. Work Practice Standards	The permittee shall maintain and operate the source in accordance with manufacturers specifications.	The facility maintains manufacturer specifications. Routine preventative maintenance is scheduled through the facility's maintenance tracking system.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603] (What emission limitations, operating limitations, and other requirements must I	Section D - VI. Work Practice Standards	The permittee must comply with the following requirements as specified in Item 4 of Table 2d to 40 CFR 63 Subpart ZZZZ: (a) Change oil and filter every 500 hours of operation or annually, whichever comes first; (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first...	Routine preventative maintenance is scheduled through the facility's maintenance tracking system.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?)				
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories \$40 CFR 63.6605] (What are my general requirements for complying with this subpart?)	Section D - VI. Work Practice Standards	(a) The permittee must be in compliance with the requirements in this subpart that apply to you at all times. (b) At all times the permittee must operate and maintain the engines in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of w...	The facility uses established tracking spreadsheets to document operating hours and a maintenance scheduling system to confirm that preventative maintenance is performed.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories \$40 CFR 63.6625] (What are my monitoring, installation, operation, and maintenance requirements?)	Section D - VI. Work Practice Standards	(a) The permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air poll...	The facility uses established tracking spreadsheets to document operating hours and a maintenance scheduling system to confirm that preventative maintenance is performed.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for	Section D - VI. Work Practice Standards	The permittee must demonstrate continuous compliance with the requirements in Item 4 of Table 2d to 40 CFR 63 Subpart ZZZZ according to the following methods as specified in item 9 of Table 6 to 40 CFR 63 Subpart ZZZZ.	The facility uses established tracking spreadsheets to document operating hours and a	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
Source Categories §40 CFR 63.6640] (How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?)		(a) Operating and maintaining the stationary RICE according to the manufacturer...	maintenance scheduling system to confirm that preventative maintenance is performed.	
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595] (When do I have to comply with this subpart?)	Section D - VII. Additional Requirements	The permittee must comply with the applicable requirements of 40 CFR 63 Subpart ZZZZ no later than May 3, 2013.	The facility uses established tracking spreadsheets to document operating hours and a maintenance scheduling system to confirm that preventative maintenance is performed.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
C02 - FLARE SYSTEM (STEAM-ASSISTED) [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] The permittee shall (a) monitor continuously the heat content of the flare gas using a gas chromatography (GC) analyzer or Department approved device (b) monitor continuously the velocity of the gas ...	The facility measures flare BTU value using a flare gas analyzer. Flare exit velocity is measured using a dedicated flare flow meter.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
C02 - FLARE SYSTEM (STEAM-ASSISTED) [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - IV. Recordkeeping Requirements	(1) The permittee shall maintain daily records of : (a) the readings of the heat content (b) the readings of the exit velocity (c) the calculations of the net heating value and the exit velocity, on a three (3) hour rolling average (2) At least 90% of each quarter's data shall be available at all ...	Facility records are maintained for the net heating value, exit velocity, and data availability.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
C02 - FLARE SYSTEM (STEAM-ASSISTED) [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] (a) The permittee shall notify the Department within two hours during normal working hours of any malfunction of the flare which is expected to last longer than two hours. (b) The permittee shall submit ...	Facility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
C02 - FLARE SYSTEM (STEAM-ASSISTED) [25 Pa. Code §127.441] (Operating permit terms and	Section D - VI. Work Practice Standards	The flare shall be operated with no emissions of malodorous air contaminants detectable beyond the plant's property in conformance with 25 Pa. Code Section 123.31	To prevent the detection of malodors outside of the property, the facility has work practices in place, in accordance with applicable regulatory requirements and as specified by individual permit terms and	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
conditions.)			conditions below. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections", the facility's total event reporting process, and the hydrocarbon Leak Detection and Repair program. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
C02 - FLARE SYSTEM (STEAM-ASSISTED) [25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section D - VI. Work Practice Standards	[Additional authority of this permit condition is also derived from 25 Pa. Code §129.97(c)(6).] The permittee shall (a) operate and maintain all devices according to manufacturer's specifications and/or good operating practices. (b) calibrate the GC analyzer and the gas flow meter, according to ...	Facility has system in place to maintain the flare analyzer and flow meter in accordance with good engineering practices. Calibrations of this equipment take place on a monthly basis.	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
C02 - FLARE SYSTEM (STEAM-ASSISTED) [25 Pa. Code	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(n).]	Statement of law that impose no compliance obligations and are thus not amenable to	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

Citation	Permit Section	Terms & Conditions Contained in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
<p>\$127.441]</p> <p>(Operating permit terms and conditions.)</p>		<p>The flare system is for the control of Volatile Organic Compound (VOC) emissions from Plant 1 and Plant 2 manufacturing sources, except the typical atmospheric venting - PSV lifts, etc.</p>	<p>certification.</p>	

